Polyphonic dialogue as a support for intentional pedagogy in the IZPD

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Abstract

Human learning does not occur in a vacuum nor is it a mere individual processing of information. It happens within relationships that can either enhance or inhibit development. This article argues that the educational relationship is the key aspect of any teaching-learning process, and that polyphonic dialogue constitutes the most appropriate supportive medium for an intentional pedagogy grounded in the Integral Zone of Proximal Development (IZPD). The concepts of intentionality, IZPD (knowing, being able, wanting, believing), and polyphonic dialogue (Bakhtin, Sidorkin) are reviewed, distinguishing it from monologue and dialectics. A practical intervention model based on four phases is proposed: dialogic diagnosis, shared design, conversational scaffolding, and polyphonic reflection. Examples are presented in handball, mathematics, and vocational training, and the challenges and conditions for its implementation are discussed. The main conclusion is that educating is, above all, orchestrating voices so that each learner deploys their intentionality in a context of mutual recognition.

Keywords: polyphonic dialogue, intentional pedagogy, Integral Zone of Proximal Development, educational relationships, Bakhtin, Sidorkin.

1. Introduction

Throughout much of the 20th century, mainstream pedagogy conceived teaching as a process of transmitting content from those who know to those who do not. The student was a receiver, the teacher a transmitter. The relationship between them was functional: the teacher taught, the student learned. This model, which we might call nomological, has been questioned from various perspectives: sociocultural psychology (Vygotsky), neuroscience (Rizzolatti), anthropology (Mead), and dialogic philosophy (Bakhtin, Buber).

In recent decades, a consensus has emerged: learning is essentially relational. Not only because it occurs in interaction, but because the quality of that

interaction largely determines what is learned, how it is learned, and whether one wishes to continue learning. However, not just any educational relationship is equally effective. The authoritarian relationship (based on the educator's power) may generate obedience but rarely autonomy. The laissez-faire relationship (based on the absence of direction) may generate boredom or disorientation. What is needed is a relationship that is at once stimulating and respectful, directive and open, demanding and welcoming.

This article proposes that polyphonic dialogue – a concept taken from the work of Mikhail Bakhtin and pedagogically developed by Alexander Sidorkin – is the type of relationship that best fits an intentional pedagogy based on the Integral Zone of Proximal Development (IZPD). Intentional pedagogy places at the center the questions of meaning (what, why, for what purpose, etc.) and seeks for the learner to progressively internalize the aims of the activity. The IZPD, for its part, provides a diagnosis of the four personal dimensions that condition learning: knowing, being able, wanting, and believing. Polyphonic dialogue is the vehicle that allows exploring these dimensions, offering adjusted support, and transforming external intentions into internal ones.

The article is structured in six sections. Following this introduction, the foundations of the educational relationship as a key aspect are presented. Then the concept of polyphonic dialogue and its differences from other forms of communication are developed. Next, it is integrated with intentional pedagogy and the IZPD. Practical examples are offered and challenges are discussed. Finally, conclusions for educational practice are drawn.

2. The Educational Relationship as a Key Aspect

2.1. Evidence of the Relational Nature of Learning

Contemporary research has accumulated solid evidence on the centrality of relationships in learning:

• Neuroscience: Mirror neurons (Rizzolatti & Sinigaglia, 2006) show that we understand the actions and intentions of others by internally simulating them. This implies that the brain is designed to learn in relationship, not in isolation.

• Developmental Psychology: Gopnik (2012) demonstrates that children learn through observation, imitation, and conversation with adults, long before formal instruction becomes effective.

• Ethology: De Waal (2013) documents cooperative, consoling, and justice-oriented behaviors in primates that form the biological basis of morality and social learning.

• Anthropology: Mead (1928) showed that norms and values are transmitted through community relationships, not through explicit lessons.

2.2. Relationship as Scaffolding and as End

Following Vygotsky (1978), the relationship with a more competent other is the means through which the Zone of Proximal Development is actualized. But Sidorkin (2007) goes further: the relationship is not only the means, but also the end of education. Educating means establishing quality educational relationships – characterized by trust, respect, and recognition – and content is the vehicle for establishing those relationships.

This idea has radical consequences: one does not teach mathematics, handball, or language so that students know mathematics, handball, or language; one teaches mathematics, handball, or language so that, through them, students learn to relate to themselves, to others, and to the world.

2.3. Consequences of a Poor Educational Relationship

When the educational relationship is deficient (authoritarian, negligent, inconsistent), problems arise that no well-taught content can resolve:

• Chronic demotivation: the learner finds no meaning in what they do because no one has helped them connect the activity with their interests.

• Superficial learning: memorization for the exam or execution for the coach, but there is no deep understanding or transfer.

• Dropout: especially in adolescents, the lack of connection with the educator is one of the main causes of dropout.

• Disruptive behaviors: aggression, passivity, or sabotage are often expressions of a failed relationship.

Conversely, a positive educational relationship acts as a protective factor against difficulty and as an accelerator of learning. Learners make more effort, tolerate frustration better, and collaborate with others.

3. Polyphonic Dialogue: Beyond Monologue and Dialectics

3.1. Origin of the Concept: Bakhtin and Literary Polyphony

Russian literary critic Mikhail Bakhtin (1981) introduced the term polyphony (literally, "many voices") to describe Dostoevsky's novels. Unlike monological novels, where the author imposes a single voice and the characters are its spokespersons, in Dostoevsky each character has their own irreducible voice that dialogues with others without being reduced to them. Truth is not in one voice nor in the sum of all, but in the space of dialogue between them.

3.2. Three Types of Educational Communication

Sidorkin (2007) applied the idea of polyphony to education, distinguishing three communicative models:

Model	Structure	Implicit Objective	Problem
Monologue	One voice speaks; the others remain silent or repeat.	Impose a single truth.	Annuls the learner's subjectivity.
Dialectics	Two or more voices confront each other; one wins, the other(s) lose(s).	Demonstrate which position is correct.	Generates winners and losers; no co-construction.
Polyphonic Dialogue	Multiple voices coexist, respond to each other, enrich each other, without reduction.	Understand diversity, find connections.	Requires more time and relational security.

In polyphonic dialogue, it is not about agreeing. It is about recognizing the legitimacy of each voice and seeking how they can illuminate each other. A

disagreement is not a problem to be solved, but an opportunity to explore different perspectives.

3.3. Conditions for Genuine Polyphonic Dialogue

According to Sidorkin (2007) and other authors (Burbules, 1999), for dialogue to be polyphonic, the following are required:

1. Psychological safety: participants must trust that their voice will be heard without mockery, punishment, or marginalization.
2. Communicative equality: although roles are asymmetrical (educator-learner), in the space of dialogue everyone has the same right to speak and be heard.
3. Openness to change: the educator must be willing to modify their own ideas based on what they hear; it is not about simulating openness while already having the answer.
4. Time without pressure: polyphonic dialogue cannot be rushed. It requires pauses, silences, backtracking, and re-elaborations.

4. Integration with Intentional Pedagogy and the IZPD

4.1. Intentional Pedagogy and the Seven Questions

Intentional pedagogy (Mascarell, 2025) starts from the idea that human beings are goal-oriented agents. Every learning action responds to seven universal questions: what, why, for what purpose, when, where, how, how much. The educator must help the learner make their answers explicit and increasingly autonomous.

The problem is that, in practice, many of these answers are unconscious, confused, or contaminated by fears and negative expectations. The educator needs a method to access them without imposing their own. Polyphonic dialogue is that method.

4.2. The Integral Zone of Proximal Development (IZPD)

The IZPD (Mascarell, 2026) expands the Vygotskian concept by including four personal dimensions:

• Knowing: declarative and procedural knowledge.

• Being able: technical, physical, or cognitive capacities.

• Wanting: motivations, interests, goals, emotions.

• Believing: self-efficacy expectations, attributions, beliefs.

Each dimension has its own zone of proximal development: what the learner does alone and what they can do with help. Effective teaching must diagnose each zone and offer specific scaffolding.

4.3. Polyphonic Dialogue as a Diagnostic and Scaffolding Tool

Polyphonic dialogue is the ideal means for diagnosing each dimension because it allows the learner to express their own voice without feeling judged:

Dimension	Dialogic Questions for Diagnosis
Knowing	"Tell me what you know about this. Is there anything you find confusing?"
Being able	"What are you good at? In what situations do you feel you can do it?"
Wanting	"What do you like about this? What would you like to achieve? Is there anything holdi back?"
Believing	"Do you believe you can improve? Why or why not? What makes you think that?"

Once diagnosed, polyphonic dialogue allows scaffolding without imposing. Instead of saying "do this," the educator says: "I would try this. What do you think? Or would you prefer to try something else? Tell me how you feel afterwards."

5. Practical Intervention Model

Based on the above integration, a four-phase intervention model is proposed.

5.1. Phase 1: Dialogic Diagnosis

• The educator creates a space (circle, small group, individual interview) where each learner can express their voice about the activity.

• Open-ended questions that invite reflection, not single answers, are used.

• Answers are not corrected or evaluated; they are welcomed.

• Notes of the main voices are taken to design the intervention.

Example in handball: Before the season, the coach sits with each player and asks: "What do you expect from this year? What do you like most about handball? Is there anything that concerns you?"

5.2. Phase 2: Shared Design

• Based on the diagnosis, the educator proposes objectives and activities but negotiates them with the learners.

• The seven questions for each activity are made explicit: "We are going to do this. What do you think it is for? How would you prefer to do it?"

• Reasonable modifications proposed by learners are accepted.

Example in the classroom: "We need to work on reading comprehension. I've thought about reading this story and then having a debate. Does that seem good to you? Does anyone suggest another way?"

5.3. Phase 3: Conversational Scaffolding

• During the activity, the educator intervenes through polyphonic questions, not through direct instructions.

• Questions may be exploratory ("What are you feeling?"), reflective ("Are you doing what you wanted to do?"), or supportive ("What would you need to achieve this?").

• The educator offers their own voice as one among many ("I think that... but I'm not sure. What do you think?").

Example in vocational training: The novice worker cannot weld correctly. The trainer does not say "adjust the temperature." They ask: "What do you notice when you start welding? Have you tried changing anything? What do you think would happen if you raised the temperature a little?"

5.4. Phase 4: Polyphonic Reflection

• At the end of the session or project, learners are brought back together in a dialogic space.

• Questions asked: "What have we learned? What was difficult for us? What has changed in us?"

• Each person is encouraged to express their voice, and also to comment on others' voices ("What X said made me think about...").

• The goal is not a single conclusion, but an enriched understanding of the experience.

Example in handball: After a lost match, the coach does not give a motivational speech. They gather the team and ask: "What did each of you feel in the locker room after the match? What can we learn from this? Does anyone want to share something that taught them something new?"

6. Applied Examples in Different Domains

6.1. Handball: Transforming a Conflict Between Players

Situation: Two players on a youth team dispute the role of main shooter. They accuse each other of not passing. The atmosphere is tense.

Polyphonic intervention: The coach meets with the two players separately and then together. In the joint meeting, each expresses their voice without interruption. The coach paraphrases: "You feel you get few passes. You feel that when you pass, the other doesn't return it." Then asks: "What can we do so that both of you feel more comfortable?" The players propose: "Let's agree that on each attack, whoever receives first must pass at least once before shooting." The coach accepts the proposal and commits to reminding them during matches.

Result: The players not only resolve the conflict but learn to dialogue for future disagreements.

6.2. Mathematics Classroom: Overcoming Exam Anxiety

Situation: 14-year-old students show high anxiety before exams, which affects their performance.

Polyphonic intervention: The teacher dedicates a session to talking about exams. They ask: "What do you feel when I tell you there's an exam?" Responses include: "fear of failing," "pressure from my parents," "I freeze up." The teacher

does not say "don't worry." Instead, they ask: "Has anyone found any strategy to feel better?" Some students share tricks (breathing, starting with easy questions, etc.). The teacher adds: "I've observed that those who start by solving the problem they have the most confidence in tend to perform better. Do you want to try?" They agree that in the next exam, the first 5 minutes will be for guided internal "self-conversation."

Result: Students feel heard. Anxiety does not disappear, but it is no longer a taboo. Some adopt the strategies and improve their performance.

6.3. Vocational Training: Adapting to New Procedures

Situation: A company implements new management software. Veteran workers resist the change.

Polyphonic intervention: The trainer does not impose a mandatory course. They organize small groups where each worker expresses their concern. Voices include: "I don't have time to learn," "The old system worked fine," "I'm afraid of making mistakes." The trainer collects all voices and presents them to management. Together they design a gradual transition: both systems are maintained for a month, an expert colleague is assigned as a "godfather" to each veteran, and a chat channel for anonymous questions is created.

7. Discussion: Challenges and Conditions for Implementation

7.1. Educator Training in Dialogic Competencies

Polyphonic dialogue is not spontaneous; it requires practice. Most educators have been trained in monologue (giving instructions, correcting, evaluating). Learning to listen, to ask open-ended questions, to tolerate uncertainty, and not to impose one's own voice as the only truth is a profound cultural change. Specific training programs are needed that include simulation, recording, and analysis of one's own communicative practice.

7.2. Group Size

Polyphonic dialogue is easier in small groups (maximum 15-20) than in large masses (100 students). But even in large groups, it is possible to create spaces for polyphonic dialogue through techniques such as:

• Dividing into subgroups and then bringing voices to the plenary.

• Using anonymous tools (cards, applications) so everyone can express themselves.

• Conducting chain dialogues (one student speaks, then chooses the next).

7.3. Tension with Measurable Results

In educational systems oriented toward standards and standardized tests, time spent on dialogue may seem like a waste. However, evidence shows that when students feel heard and participatory, they learn faster and retain better. Furthermore, polyphonic dialogue does not exclude objective evaluation; it complements it. Performance can be measured and dialogue about the process can be held.

7.4. Sustainability of Polyphonic Dialogue Over Time

Polyphonic dialogue cannot be a one-time event; it must become an institutional practice. This requires:

• Incorporating dialogic spaces into the regular schedule (not only when there are problems).

• Training all staff (not only the most motivated educators).

• Also evaluating the quality of dialogue (through participation rubrics, reflection, etc.).

8. Conclusions

1. The educational relationship is the key aspect of any teaching-learning process. Without a relationship of trust, respect, and recognition, learning becomes superficial, fragile, or non-existent.
2. Polyphonic dialogue – a concept taken from Bakhtin and developed by Sidorkin – is the type of relationship that best fits the needs of the contemporary learner. In contrast to monologue (which imposes) and dialectical dialogue (which confronts), polyphonic dialogue welcomes and orchestrates the diversity of voices, intentions, and truths.
3. Intentional pedagogy and the Integral Zone of Proximal Development provide the framework for understanding what each learner needs (knowing, being able, wanting, believing) and for what purpose.

Polyphonic dialogue is the vehicle that allows diagnosing those needs and offering adjusted support in a respectful and effective manner.

4. The practical four-phase model (dialogic diagnosis, shared design, conversational scaffolding, polyphonic reflection) offers a roadmap for implementing polyphonic dialogue in handball, in the classroom, in vocational training, and in any other domain.
5. The challenges (educator training, group size, pressure for results) are real but surmountable through gradual implementation and institutional commitment to relational quality.

Educating is, above all, orchestrating voices. Not so that all say the same thing, but so that, from their difference, they can learn from each other and together build something that no single voice alone could achieve. Polyphonic dialogue is not a technique; it is an attitude. And that attitude is the foundation of an intentional pedagogy that recognizes the learner as an agent, not as an object.

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